

THE GREENBILLED OR CEYLON COUCAL *CENTROPUS*
CHLORORHYNCHUS BLYTH — SRI LANKA'S RAREST ENDEMIC SPECIES¹

THILO HOFFMANN²

Observations are made on a pair of Ceylon Coucals and a call hitherto not recorded is described. This endemic species is endangered.

On 29 January 1988, Ben King of the American Museum of Natural History, together with James and Robert Clements, observed a Greenbilled Coucal *Centropus chlororhynchus* at Kitulgala, where the species is known to exist. At that time the coucals were calling very early in the morning between 0600 and 0630 hrs, and Ben King managed to record on tape a call which had hitherto not been described, and which consists of a series of double notes, *hoo*, *hoo-hoo*, *hoo* ('oo' short), two *hoo*'s in quick succession, then a pause, followed by another two *hoo*'s, which may be repeated twice or thrice, occasionally four times. The sound is rather gentle and by no means loud, though it carries far and can clearly be discerned amongst the much louder calls of the Brownheaded Barbet *Megalaima zeylanica* and Yellowfronted Barbet *Megalaima flavifrons* in a general babble of early morning bird song. When Ben King gave me a copy of the tape, I decided to try my luck and visited the area on 13 February 1988.

With my wife and a friend I arrived at Kitulgala from Colombo shortly after 0500 hrs, and had to wait till 0600 before daylight broke, and another half hour before the ferryman from across the river bothered to come with his outrigger dugout to pick up the waiting passengers, of whom there were quite a few. Just before 0600 hrs, when it was still dark (the sky was overcast), I heard the Common Coucal *C. sinensis* from across the river and also what I thought was the same call Ben King had recorded, but only briefly and not again. In recent years birdwatchers have reported seeing

and hearing Greenbilled Coucals in several low-country wet zone locations (Labugama, Sinharaja, Kitulgala) and most refer to the deep, booming call. I think Henry (1955, p.182) renders it fairly well as *hooo-poop*, *hooo-poo-poo*, the *poop* being lower pitched than the *hooo*, but those who have not actually heard it may be unable to mentally transfer the written letters into sound, interpreting the treble and double o's in Henry's description as long-drawn out booming sounds, whereas King's taped call consists of a short double syllable which might be better transliterated as *hu*, *hu* ('hu' as in book). Contrary to what Henry writes, the two syllables recorded by King are identical and at the same pitch. According to Legge (1880) the call is a 'long-drawn *hoo-whoop*, *whoop*'. Compare with the Common Coucal: *hooop*, *hooop*, *hooop*, (Legge) and *hoop oop oop oop oop* (Henry). I fear that the call of the Common is often mistaken for that of the Greenbilled.

When we reached the opposite bank it was already well past 0630 hrs, and we went towards the bottom of the valley through which runs from the south a tributary of the Kelani Ganga, just opposite the Kitulgala Resthouse. The area consists of densely covered village gardens with scattered houses and several paths, Coconut and Areca palms (*Areca catechu*), Jak trees (*Artocarpus integra*), Avari-nuga (*Alstonia macrophylla*), Sapu (*Michelia champaca*), and other planted timber and fruit trees, groves of betel, yams, coffee, and an occasional tiny paddy field as well as ornamental shrubs and trees. Despite being inhabited, this small area is thickly covered with trees and vegetation. Due to the annual drought at the time of the visit, the ground was parched and with without herbage; many trees and shrubs were

¹Accepted April 1988.

²PO Box 11, Colombo, Sri Lanka.

shedding leaves. Near the last house on the path to the valley, we observed a Coucal fleetingly in a king coconut tree, from where it slunk down into some coffee bushes. We waited and played Ben King's recording. Nothing happened, but after a while a Common Coucal hopped out of the coffee into the open under some coconut palms. It was absolutely silent, hopping and strutting along the open ground. It did not react in any way to the taped call of the Greenbilled Coucal. We moved further in the direction of the tributary, separated, waited and watched.

I went down to the nearly dry riverbed with many boulders and nice natural vegetation on either bank. Suddenly a coucal flew from one bank to the other, and it was indeed the Greenbilled, the bill being very clearly visible to the naked eye at a distance of 7 to 10 m. The massive bill of the bird is ivory coloured and very eye-catching. The bird flew into a *Lagerstroemia* tree on the other bank which was heavily overgrown with the thorny creeper *Hinguru-wel* (*Acacia* sp.). It stayed there, partly hidden from view with the bill rarely visible; from time to time it moved stealthily from branch to branch in various directions. After a while a second bird of the same species flew across the river into the same tree and both then moved about or sat in the thicket, no more than 10 m away from where we were in the riverbed. The flight is a flapping, gliding progression.

From then on we watched the two birds for a full 2 1/2 hours (and could have gone on, undoubtedly). As we played the tape, the birds would cross and re-cross the river as if trying to pinpoint the exact location of the sound. As time went by they came closer and closer and sometimes sat in the branches right above us. The birds very noticeably reacted to the call recorded by Ben King. Whenever it was played they turned their heads as if listening, or began moving. The immediate reaction to the sound could very clearly be seen. Occasionally the birds would come out of cover and become fully exposed to view on the hanging stems of the *Hinguru-wel* creeper or in an opening of the leaf canopy. We could observe at

length every feather and every feature of the two birds.

The most spectacular part is, of course, the bill, ivory coloured, as already mentioned, somewhat off-white, with a barely perceptible tinge of green or greenish. We watched the birds with the naked eye and through excellent binoculars. The massive looking bill is relatively larger than that of the Common Coucal. It is also more acutely down-curved and more pointed, even more than shown in Henry's black and white sketch (p. 182). This might indicate that the Greenbilled Coucal is more specialized on particular sources of food (perhaps snails) than its common cousin. Throughout the 2 1/2 hours that we observed the birds, they never fed and not once came down to the ground or near the ground, always moving within trees and thickets, say 3 m or more above ground. The breast of the Greenbilled Coucal shows individual feathers or groups of feathers in a sculptured manner and the sheen on the breast and throat, especially the sides of the breast, is purplish. The chestnut of the wings is darker than in the Common Coucal.

The description light green or pale apple green as generally applied to the colour of the bill in the literature is in my view quite misleading, and so is the name by which the bird is commonly known in Sri Lanka (Henry). Ali and Ripley call it the Ceylon Coucal, and so do Wait and Fleming, which seems more appropriate than Greenbilled. Legge called it the Ceylonese Coucal. One could well name it the Ivorybilled Coucal or the Palebilled. Birdwatchers who have never seen this coucal look for an apple green bill, and it has happened that the Common Coucal carrying a mantis or a grasshopper in its beak was mistaken for the endemic species. The illustration of the beak by John Henry Dick in Ali and Ripley's PICTORIAL GUIDE (1983) is far too green, and its shape and size are not quite right either. The illustration in Legge is superb, though the bill is also rather too green. It is possible that in the hand (or in dead specimens) the greenish tinge is more noticeable than in the field.

During the entire period of observation we never heard the *hoo, hoo* call of the tape, but after

about an hour, when both birds were in the same tree right opposite us, one of them gave off a series of gentle, low, single-syllable *hoo*'s which sounded like the call of the Ceylon Fish Owl *Ketupa zeylonensis*, soft but sonorous, best emulated with closed lips, with rather long spacings between each call. The bird dipped its head with each syllable, the sound being produced with the beak shut. Thereafter we heard this same gentle, mournful, mono-syllabic call a number of times on either side of the river. It would appear to be a communicating call between the pair. We did not hear any other notes like Henry's *chewkk* (courting) or Legge's loud *dhjoonk* (alarm).

The range of this pair of Greenbilled Coucals seems pretty small and restricted, and it appears to overlap with the range of one or several Common Coucals. Judging from the non-reaction of the Common Coucal to the taped call of the Greenbilled, the two species do not seem to interact in any way and may have their separate niches for food, roosting and nesting in a shared general habitat. Henry says that pairs of the Common Coucal, which appear to mate for life, are very jealous of any encroachment of their territory by other coucals, which does not appear to apply to the other species; no Common Coucal turned up during our observation. It would seem that the Greenbilled Coucal is less terrestrial than its common cousin, as we did not see it on the ground, whereas the Common spends a lot of time on the ground.

Interestingly there is no bamboo anywhere in this particular habitat, and Fleming's speculation that bamboo is an indispensable critical element for the survival of this rare bird may not be tenable. Except for a narrow strip on either side of the river, the vegetation is mostly man-made or strongly man-influenced. It is not at all the climax-type, undisturbed rain forest presumed essential for the Greenbilled Coucal, but a mixture of typical wet zone village gardens with their high and low tree and bush cover (Coffee, Coconut, Areca), weeds, and patches of uncultivated land. There is forest not far away up the valley, rain forest which has been heavily logged some years

ago and in which are present a number of typical wet zone forest birds, including many of the endemics. This forest does contain some bamboo (*Bata*) as undergrowth, but the Greenbilled Coucal has not been noted so far in this natural (though logged) forest, where the Ceylon Magpie *Cissa ornata* nests, where the White-headed Starling *Sturnus senex*, the Redfaced Malkoha *Phaenicophaeus pyrrhocephalus* and the endemic babblers are found.

So far the Greenbilled Coucal has only been observed in the village area at the bottom of the valley, in close proximity to human habitations and much human goings on, with gardens and cultivations, though all well covered with trees and shrubs. Kitulgala, 100 km east of Colombo, lies in a deep, rather narrow valley at the foot of the central mountain massif near where the various streams which form the Kelani Ganga, one of the country's major rivers, join together after their descent from the hills. The elevation is about 65 m above m.s.l. Just east of Kitulgala the mountains begin to rise steeply. The place is embedded in forest or plantation covered hills (rubber and tea). It lies in the area of the highest rainfall in Sri Lanka, around 5000 mm average per annum. The natural forest is tropical rain forest. There is a dry period in January/February each year, otherwise precipitation is heavy throughout, with high temperatures and high humidity.

According to Henry the breeding season of the Greenbilled Coucal appears to be the first half of the year (Legge: Probably April or May to July). The domed nest, which is placed in thorny bushes (e.g. *Hinguru-wel*) 1 to 1.5 m from the ground, has rarely been found. If the bird was calling ("singing", according to Ben King) intensively at the end of January when Ben King heard and taped it, and is now silent 2 weeks later, it might be that the courting season is over and nesting might have started. We saw no evidence of nest-building or any activity connected with breeding, though the two birds obviously were a pair. Ben King saw only one bird. Greenbilled Coucals were heard calling on 27 December 1989 in the Morapitiya Forest Reserve (P.B. Karunaratne,

pers. comm.) and on 26 January 1989 at Sinharaja (Dr P. Samaraweera, pers. comm.), both times in the early afternoon (CBCN).

The Greenbilled Coucal is almost certainly the rarest of the Sri Lankan endemics, and thus one of the rarest birds in the world. Only a few people have recently seen it and then only fleetingly. Even in Legge's time, over 100 years ago, this coucal was supposed to be very rare, probably because of its wary and secretive habits, but Legge found it in considerable numbers throughout a large tract of the wet zone low-country from about the Deduru Oya in the north right along the bottom of the hills to Galle, and the coffee districts of the Morawak Korale; he found it numerous in the Ratnapura District and up into the Peak Wilderness forests to about 800 m. He traced it mostly by its call and says that it is seldom seen and "almost defies all discovery". In the meantime the country in which the coucal was common according to Legge has been developed to an almost unimaginable extent and is the most densely inhabited part of the Sri Lanka. Very few natural jungles remain in the form of forest reserves (including the Sinharaja MAB reserve), and the Peak Wilderness Sanctuary. Henry (1955) says about the Greenbilled Coucal: "Its range is rapidly dwindling and as it shows no sign of being able to adjust itself to new conditions, there can be no doubt that its days will soon be numbered—with those of several other endemic birds—unless wise foresight reserves extensive forest sanctuaries in the wet zone". So far very little "wise foresight" has prevailed, with most forest reserves dwindling from year to year, the only exception being parts of Sinharaja.

The question now arises as to what can be done to ensure the survival of this rare, attractive and probably highly specialized bird, which is unique to Sri Lanka and which today may be present in only a few hundred pairs in the locations from which it is known. An obvious place for the protection of its environment would be the Kitulgala site just described. Apart from the nearby forest reserve, the actual habitat of the birds (and I hope and assume that there is more than one pair

in the wider area) is private land. A few pairs may be secure in the small Labugama Reservoir area (drinking water for Colombo), access to which has, however, been denied to ornithologists for a number of years, ever since the National Water Supply and Drainage Board made it almost impossible for genuine researchers and observers to go there; it is now out of bounds for security reasons. On the other hand this very Labugama area is vulnerable to incursions, illicit felling and poaching from nearby villages. Other areas where the Greenbilled Coucal has been occasionally observed in recent years are Sinharaja, notably the course of the Koskulana Ganga near Kudawe which forms part of the northern boundary of the reserve, and the Runakanda-Morapitiya Forest Reserve to the west of Sinharaja. Some of the forest reserves in the south, such as Kottawa and Kanneliya, should also harbour small populations of this coucal. In all these cases the habitat is disturbed rain forest. These are the only places that I know of where in recent decades the Greenbilled Coucal has been seen or heard, and nowhere can it be plentiful.

The best hope for the Greenbilled Coucal may be the lower edge of the Peak Wilderness Sanctuary, as already suggested by Fleming. I recently visited a section of this forest above Deraniyagala-Maliboda at an elevation of between 450 and 800 m. There is thick bamboo undergrowth in nearly undisturbed forest; I heard a coucal at around noon, but am not sure which. The tape playing did not help, and a long-time resident told me that he had never heard the taped call. As Legge found the bird numerous in the Ratnapura District, it should still be found in the Gilimale forest, for instance, where conditions for its existence appear to be excellent, with good forest and fine undergrowth, including bamboo; the same can be said of the forests and village gardens around and above Alupola, Hapugastenne, Carney, and Eratne, along the southern boundary of the Peak Wilderness Sanctuary, between 450 and 650 m, which I visited recently without, however, finding a trace of the coucal.

It is high time that the survival of all of Sri

Lanka's endemic birds should be purposefully planned and the necessary habitat reserves fully protected. For the last several years I have urged that the Peak Wilderness Sanctuary with some

adjoining forest reserves should be upgraded into a National Park which would provide total habitat protection for all of Sri Lanka's unique birds and most of its endemic plants and animals.

REFERENCES

ALI, S. & RIPLEY, S. D. (1969): Handbook of the birds of India and Pakistan, together with those of Bangladesh, Nepal, Sikkim, Bhutan and Sri Lanka, Volume 3. Bombay.

————— (1983): A Pictorial Guide to the Birds of the Indian Subcontinent. Oxford University Press, New Delhi.

CEYLON BIRD CLUB NOTES (CBCN). Monthly. Colombo.

FLEMING, ROBERT L. JR. (1977): Comments on the En-

demic Birds of Sri Lanka. Colombo.

HENRY, G.M. (1955): A Guide to the Birds of Ceylon. London.

HOFFMANN, T. W. (1984): National Red Data List of Endangered and Rare Birds of Sri Lanka. Colombo.

LEGG, W.V. (1880): A History of the Birds of Ceylon (3 Parts). London.